

~ DO NOT TRY THIS AT HOME ~

Experiments Done With OOZEQ

Thermal Protection System (TPS)



Oozeq contains almost 50% water and almost 50% starch. Most of the starch in Oozeq is uncooked and suspended in the starch hydrogel.

An experiment was conducted where a butane torch with a published flame temperature of 2,500° F (two thousand five hundred) focused flame was applied to the surface of a layer of Oozeq approximately 3 mm in thickness.

This layer of Oozeq protected a polystyrene foam from the flame sufficiently so that after about one minute of continuous burn the polystyrene foam was not affected by the heat.

The Oozeq was lifted off the polystyrene and examined. Charring was present at the surface of the Oozeq facing the flame. Between the charred surface and the polystyrene surface the Oozeq became rubbery and translucent, with bubbles forming throughout.

Subsequent tests indicate that over about a one minute duration this same butane flame applied directly heats the surface of a 3 mm thick Oozeq layer over 200° F (two hundred) while the surface of the Oozeq away from the flame reaches no more than about 90° F (ninety) while the flame is burning.